

Safety Data Sheet

1. Chemical product and company identification

Product name: **CheckLite HS Plus**
 Product code: 61322
 Responsible company: Kikkoman Biochemifa Company
 2-1-1, Nishi-Shinbashi, Minato-ku,
 Tokyo 105-0003, Japan
 Information: Phone: +81-3-5521-5493
 Fax: +81-3-5521-5498
 E-mail: biochemifa@mail.kikkoman.co.jp

2. Hazards identification

GHS Classification: Not classified
 GHS Label Elements: None
 Hazard statement:
 Causes mild skin irritation
 May be harmful if swallowed
 Causes eye irritation
 May cause allergy if inhaled

Precautionary statements:

If skin irritation occurs, get medical advice.
 Call a doctor if you feel unwell.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 If eye irritation persists, get medical advice.
 Wash hands after handling.
 Avoid breathing dust of the lyophilised powder.
 IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in apposition comfortable for breathing.

3. Composition/information on ingredients

Product name : CheckLite HS Plus
 Description: Reagent mixture, liquid and lyophilised powder
 (1) Luciferin-luciferase reagent HS: Lyophilised powder x 2 vials

<i>Ingredients</i>	<i>Formula or chemical name</i>	<i>CAS #</i>	<i>Remarks</i>
Firefly luciferase	(Protein)	61970-00-1	
D-Luciferin	4,5-Dihydro-2-[6-hydroxy-2-benzo-thiazolyl]-4-thiazolecarboxylic acid	2591-17-5	
Magnesium acetate	C ₄ H ₆ O ₄ Mg·4H ₂ O	16674-78-5	
Tricine	N-Tris [hydroxymethyl] methylglycine	5704-04-1	
Dithiothreitol	C ₄ H ₁₀ O ₂ S ₂	27565-41-9	
Sucrose	C ₁₂ H ₂₂ O ₁₁	57-50-1	
Bovine serum albumin	(Protein)	9048-46-8	

Identified hazardous ingredients: None

(2) Reconstitution buffer for Luciferin-luciferase reagent: 5.5mL liquid x 2 vials

Ingredients	Formula or chemical name	CAS #	Remarks
Tricine	N-Tris [hydroxymethyl] methylglycine	5704-04-1	
EDTA·2Na	Ethylenediamine-N,N,N',N'-tetraacetic acid disodium salt, dihydrate	6318-92-6	<1%
Dextrine	(C ₆ H ₁₀ O ₅) _n	9050-36-6	

Identified hazardous ingredients: None

(3) ATP releasing reagent: 5.5mL liquid x 2 bottles

Ingredients	Formula or chemical name	CAS #	Remarks
Benzalkonium chloride	Alkyl dimethylbenzyl ammonium chloride	68391-01-5	
Tricine	N-Tris [hydroxymethyl] methylglycine	5704-04-1	

Identified hazardous ingredients: None

4. First aid measures

- Skin contact Wash skin with plenty of water. If symptoms occur, see a doctor.
- Eye contact Rinse eyes with plenty of water for at least 15 minutes and see an eye specialist. If symptoms occur, see a doctor.
- Ingestion Rinse mouth and throat thoroughly with water. Drink water. If symptoms occur, see a doctor.
- Inhalation Remove from exposure. If symptoms of irritation or sensitisation occur (shortness of breath, wheezing or laboured coughing), call a doctor.

5. Fire-fighting measures

- Protection against fire and explosions No special requirements.
- Suitable fire extinguishing media Water, foam.
- Non-suitable media None.
- Special exposure hazards None.

6. Accidental release measures

Spilled substance should be removed immediately. Avoid formation of dust. Take up by mechanical means, preferably by a vacuum equipped with a high efficiency filter. Flush carefully with plenty of water. Avoid splashing and high-pressure washing. Ensure sufficient ventilation. Wash contaminated clothing.

7. Handling and storage

- Safety shower and eye bath.
- Mechanical exhaust required.
- Wash thoroughly after handling.
- Avoid formation of dust. Ensure good ventilation of the room when handling this substance.
- Store at 2-8°C.

8. Exposure controls/personal protection

- Recommended personal protective equipment (PPE)
- Respiratory protection Respirator with filter.
- Hand protection Impermeable gloves.
- Eye protection Protective glasses or eye shield.

9. Physical and chemical properties

- Appearance (1) Luciferin-luciferase reagent HS: White or almost white
 (2) Reconstitution buffer for Luciferin-luciferase reagent
 (3) ATP releasing reagent: clear liquid
- Odour None.
- pH (1) Luciferin-luciferase reagent HS: Not available
 (2) Reconstitution buffer for Luciferin-luciferase reagent: 7.5
 (3) ATP releasing reagent: 12.0
- Boiling point Data not available
- Melting point Data not available

Flash point	Data not available
Relative density	Data not available
Solubility	Soluble in water
Other data	None relevant for safety.

10. Stability and reactivity

This substance is stable under normal conditions of use.

Conditions to avoid	Avoid high temperature
Materials to avoid	Sunlight, Oxidizer
Hazardous decomposition products	Data not available

11. Toxicological information

Inhalation of protein dust may induce sensitisation and cause allergic reactions in sensitised individuals

12. Ecological information

No data available.

13. Disposal considerations

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber in accordance with all applicable regulations. Any disposal practice must be in compliance with country, local, state, and federal laws and regulations (contact country, local or state environmental agency for specific rules).

14. Transport information

UN number:	Not applicable.	Sea:	Not applicable.
Road/Rail:	Not applicable.	Air:	Not applicable.

15. Regulatory information

European information

CAUTION: Substance not yet fully tested.

Irritant

R 36/37/38

Irritating to eyes, respiratory system and skin.

S 26

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36/37/39

Wear suitable protective clothing, gloves and eye/face protection

16. Other information

The information contained in this Safety Data Sheet, as of the issue date, is believed to be true and correct. However, this information is only intended as a guide, and any recommendations or suggestions are made without warranty or guarantee.

Since the conditions of use are beyond the control of our Company, it is the responsibility of the user to determine the conditions of safe use of this substance. The information in this sheet does not represent analytical specifications, for which please refer to our product specification.